Mega 100 WR ADSL2+ Router

Easy Start

Version 1.0

Chapter 1 – Introduction

Thank you for purchasing a Mega 100WR Router. This Easy start guide is a complete guide to configuring your Mega 100WR. It includes setup configurations for most operating systems. If you are setting your Mega 100WR up with a PC running Microsoft Windows operating system, it is suggested that you follow the much quicker "Quick Start Guide" that was supplied in printed form with your Router. (It is also available in soft copy on your Router CD.)

The Mega 100WR Router can be connected to any computer/notebook with a 10/100 Base-T Ethernet card, USB port or IEEE 802.11b/g Wireless adapter. The Ethernet ports have the Auto MDI/MDIX feature which allows both cross and straight UTP cable to be utilized. The Mega 100WR has an in-built IEEE802.11g Wireless LAN Access Point for wireless connectivity.

1.1 Minimum Requirements

- Pentium® MMX 233MHz
- A CD-ROM Drive
- At least one of the following, depending on how you wish to connect to the Router
  - For Ethernet connectivity - Ethernet card with TCP/IP Protocol installed
  - For Wireless connectivity - IEEE 802.11b/g Wireless adapter
  - For USB connectivity - USB port
    - One of the following operating systems
      - +Windows® 98 Second Edition
      - +Windows® Me
      - +Windows® 2000
      - +Windows® XP
      - +Windows® XP x64 Edition
      - +Macintosh OS 10.2 & above
- Web Browser - Microsoft Internet Explorer 4.0 (or later versions)

  Or

  - Netscape® Navigator 3.02 (or later versions)

1.2 ADSL Router Package

Your Mega 100WR package should contain the items shown in Figure 1-1. For any missing items, please contact the sales outlet from which you purchased this router immediately.

Wireless Router

Quick Start guide

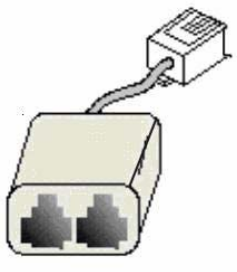
Utility CD

Cat 5 Ethernet Straight Cable

USB Cable

2 Telephone Cables

9V Power Adapter



2 micro filters

Figure 1-1 : ADSL Router Package

1.3 Mega 100WR Overview

1.3.1 Front Indicators

Fig 1-2 shows the front indicators of the Mega 100WR router.

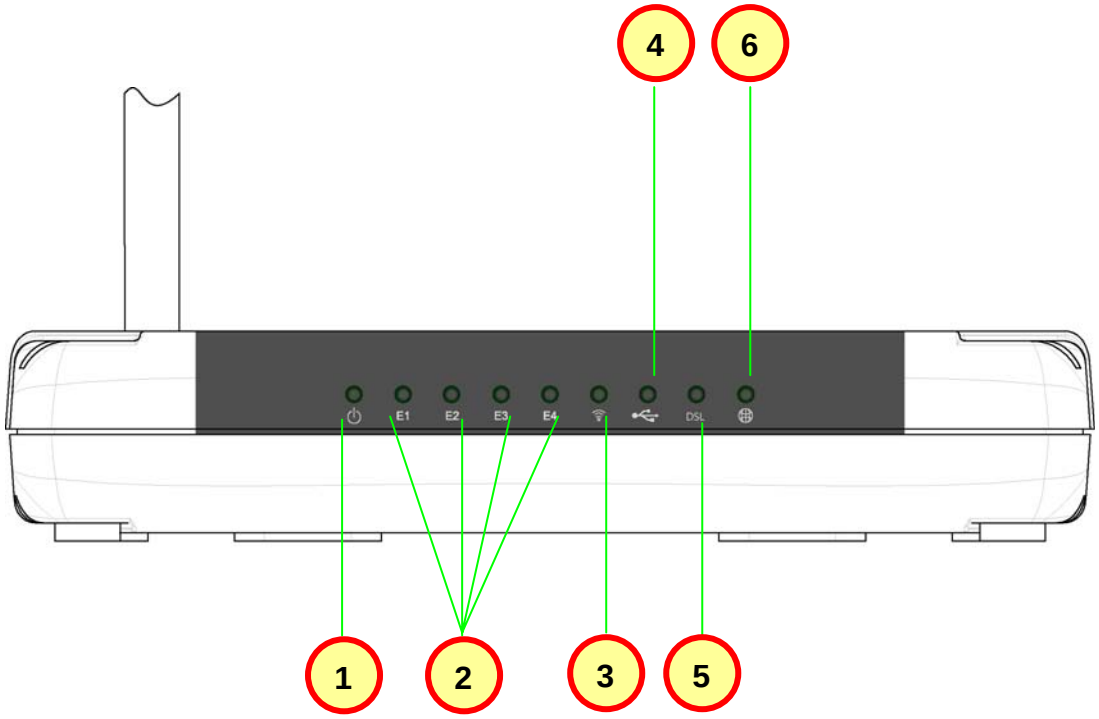


Figure 1-2 : Front Indicators

LED Name	Status & Meaning
1. Power	**Lights up** when power is supplied to the ADSL Router.
2. Ethernet(E1 - E4)	**Lights up** when the Ethernet cable is properly connected from your ADSL Router to the Ethernet Card. **Flickers** when the ADSL is transmitting/receiving data.
3. Wireless	**Flickers** when the Wireless LAN is operational.
4. USB	**Lights up** when the USB cable is properly connected from your Router to the USB port. **Light is Off** when the USB cable is not correctly connected
5. DSL	**Light is off** when no Telephone jack (RJ-11) is connected. **Flickers** when the ADSL Router is trying to establish a connection with the ADSL Service Provider (Training). Steady Green LED. **Lights up** when the ADSL connection is established.
6. Internet	Green LED **lights up** when the PPP connection is established. **Light is off** when there is no PPP connection.

1.3.2 Back Panel

Fig 1-3 shows the back panel indicators of the Mega 100WR router.

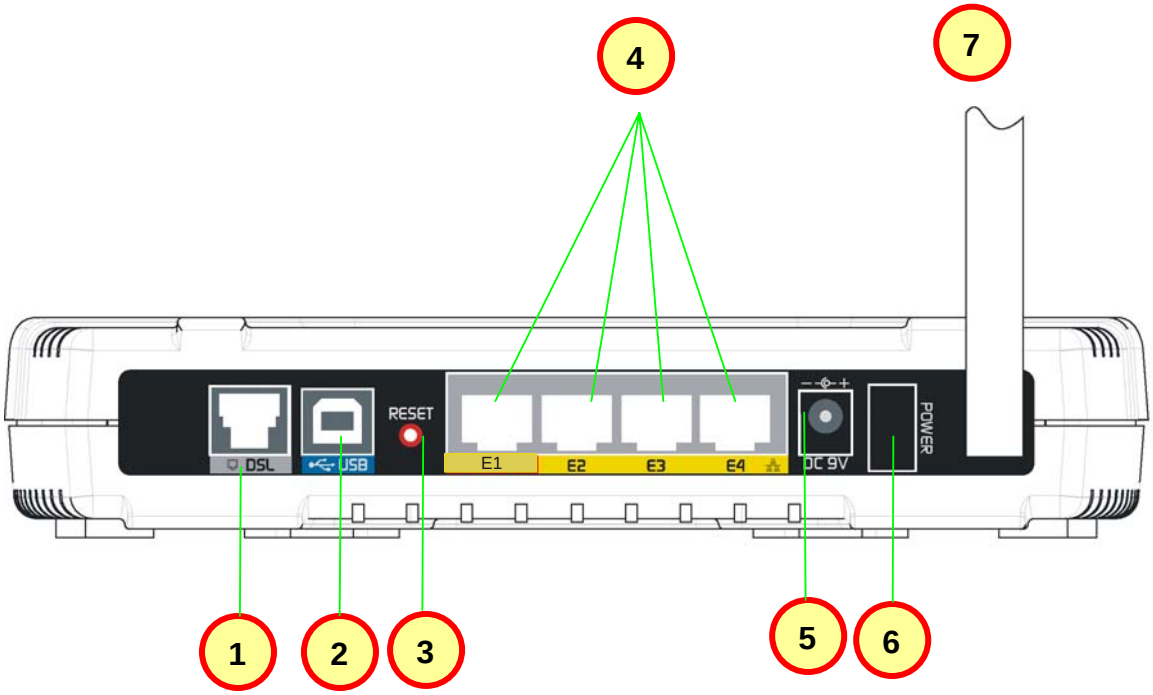


Figure 1-3 : Back Panel Indicators

Label	Description
1. **DSL**	Connect the telephone jack (RJ-11) to your Telephone Wall Socket (DSL line).
2. **USB**	Connect the USB jack to your PC's USB port, if required.
3. **RESET**	To reset the ADSL Router, simply press the reset button for at least 10 seconds (all customised settings that you have saved will be lost!).
4. **ETHERNET(E1-E4)**	10/100 Base-T Auto-MDI/MDIX Ethernet jack (RJ-45) to connect to your PC's Ethernet (Network) card or Ethernet Hub / Switch.
5. **DC 9V**	To connect to the Power Adapter that comes with your package.
6. **POWER SWITCH**	Push downwards to switch ON and press upwards to switch OFF.
7. **RF Antenna**	2.4Ghz Wireless Antenna.

1.4 Typical MEGA 100WR Router Connection

You may connect many computers to the Mega 100WR over Wi-Fi. Only 4 computers may be directly connected to the router's Ethernet ports. You may, however, connect any of the Ethernet ports to an Ethernet hub or switch. Many more computers (and other Ethernet devices) may then be connected to the router.

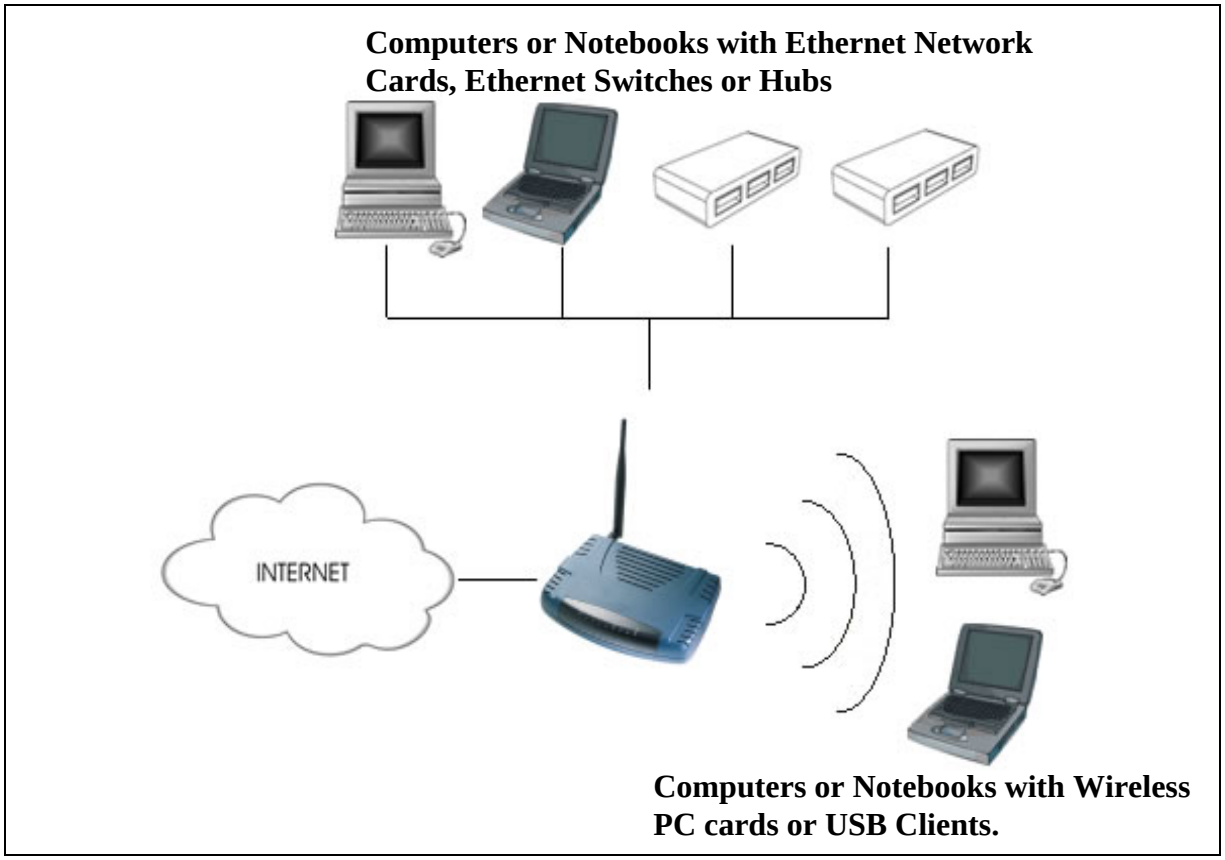

Computers or Notebooks with Ethernet Network Cards, Ethernet Switches or Hubs
INTERNET
Computers or Notebooks with Wireless PC cards or USB Clients.

Figure 1-4 : Typical device conectivity

NOTE: With the Auto MDI/MDIX feature, both cross and straight UTP cables can be used.

Chapter 2 - Setup overview

The following chapters describe how to connect your Mega 100WR. As there are many different combinations of operating systems and connection types, what follows may seem rather complicated, so here is a summery of the steps to be taken:

- Telephone line is connected to the Mega 100WR
- Power supply is connected to the Mega 100WR
- Mega 100WR is connected to your computer using USB or Ethernet (Wi-Fi is not recommended for initial setup)
- Mega 100WR is switched on
- USB drivers are installed (if necessary)
- Ethernet port is configured (if necessary)
- Web browser is configured for connection (if necessary)
- Mega 100WR is configured for internet connection
- Your Telkom internet account is verified

The easiest way to configure your Mega 100WR is by using the installation utility on of the Windows operating systems.

To configure your Mega 100WR using a particular Operating system, perform the steps in the listed chapters in the correct order.

Operating system	Chapters
Microsoft Windows (using installation utility)	Chapter 3 Chapter 5 (During chapter 5, you will be prompted to follow chapter 4)
Mac OS	Chapter 3 Chapter 6 Chapter 8
Windows XP x64 (if connecting via USB)	Chapter 3 Chapter 4 Chapter 7 Chapter 5
Other operating systems and Window without using installation utility	Chapter 3 Chapter 4 Chapter 9

Chapter 3 - Telephone and power connections

3.1 Connecting the Telephone Line

There are various ways to connect your Mega 100WR to your ADSL enabled telephone line.

- **Directly** (Without a telephone connected to the same outlet)
    - To make a direct connection, please connect as per Figure 3-1
    - If a telephone is to be connected to another outlet that shares the same telephone line, please connect it as shown in Figure 3-2
- **Together with a telephone**
    - Please connect as per Figure 3-3 if you have a single telephone outlet or Figure 3-4 if you have a twin telephone outlet.
    - Should you wish to connect another telephone to an additional outlet that shares the same telephone line, please connect this as shown in Figure 3-2

NOTE: When connecting a telephone to an ADSL enabled telephone line, you MUST ALWAYS make use of a Microfilter

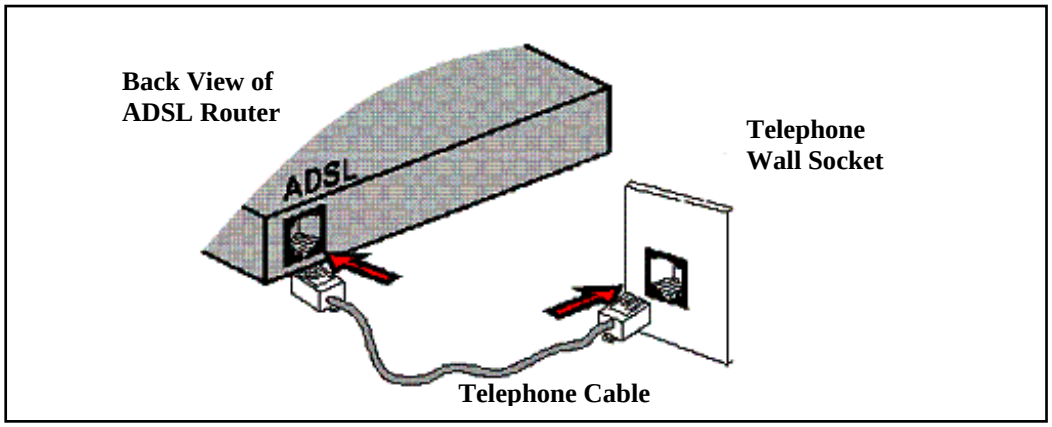


Figure3- 1 : Connecting directly to telephone outlet

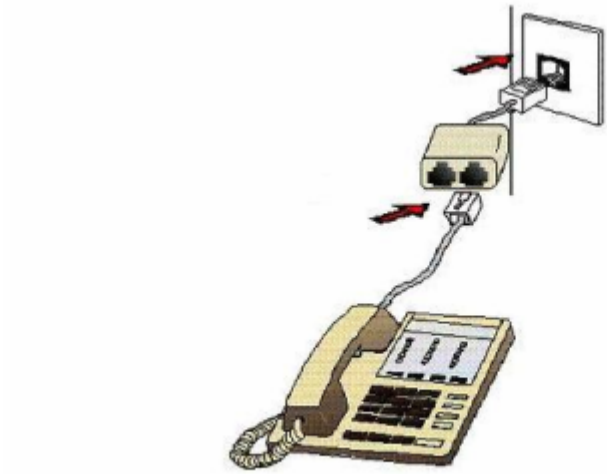


Figure 3- 2 : Connecting a telephone to the same telephone line

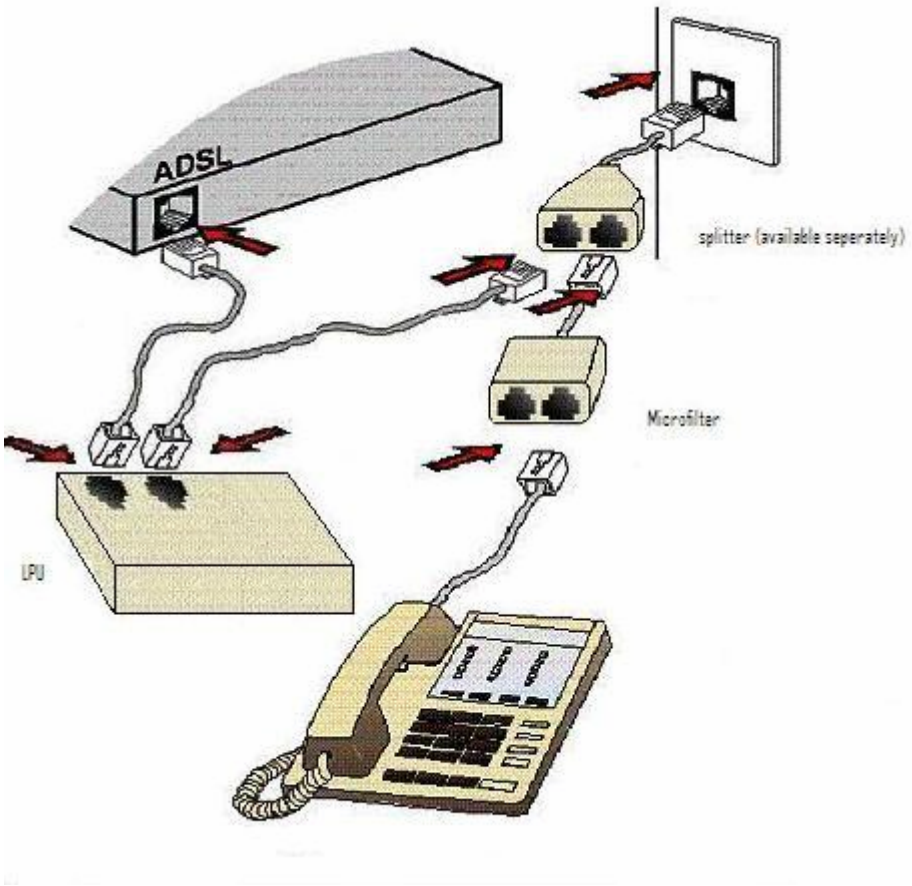


Figure3- 3 : Connecting the router together with a telephone to a single telephone outlet (using line splitter – available seperatly)

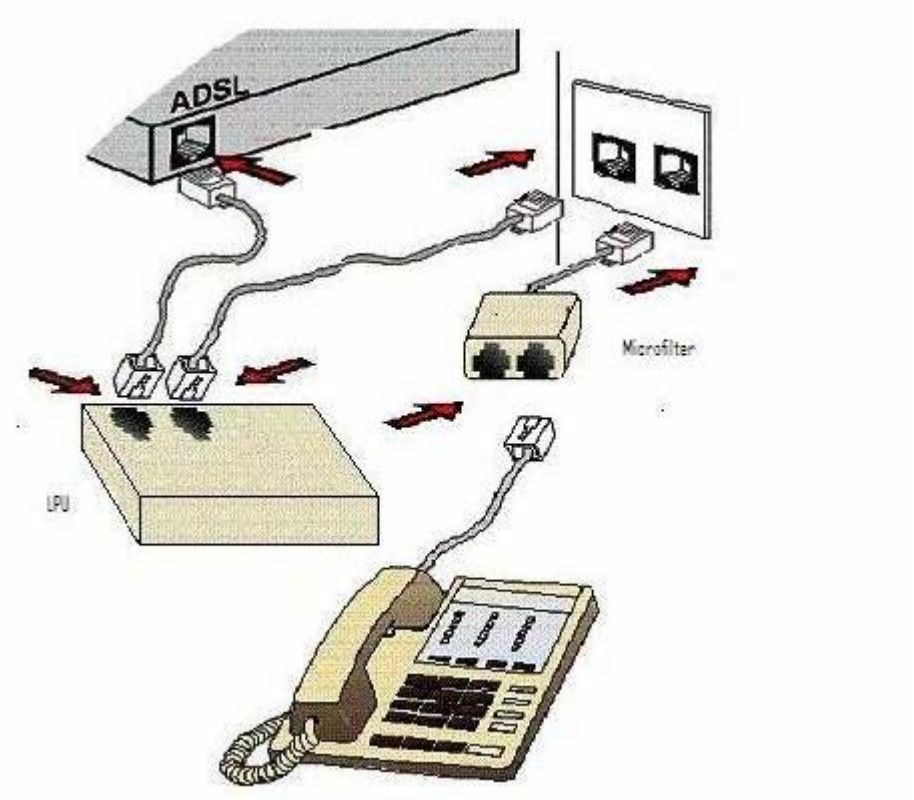


Figure 3- 4 : Connecting together with a telephone to a dual telephone outlet

3.2 Connecting to the Power Outlet

The Mega 100WR is powered through a power adaptor. This is connected to the Router as shown in Figure 3-5. The 3 pin mains plug on the other end of the power adapter is to be plugged into the mains outlet.

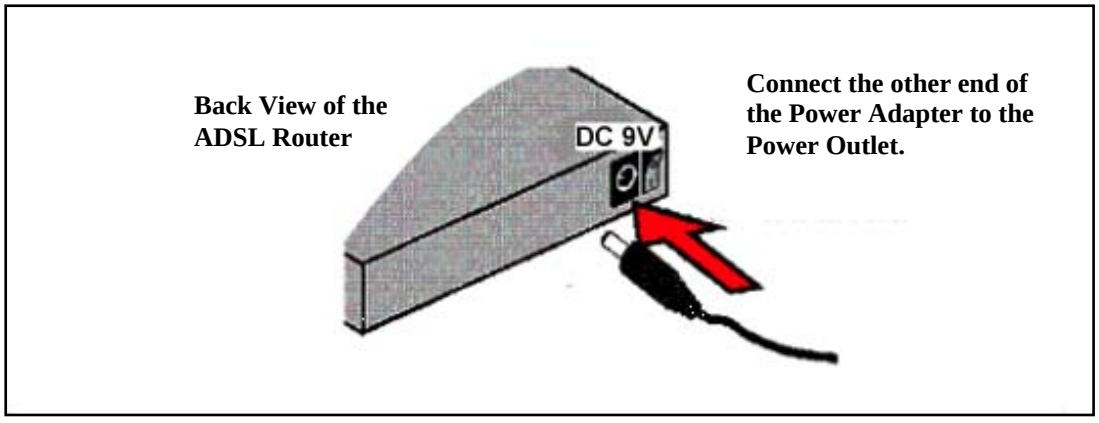


Figure 3-5 : Connecting the power adapter to the Mega 100WR

CAUTION

Use only the supplied power adaptor ! Use of any other adaptor may damage the router !

Chapter 4 - Connecting your computer

Your computer can be connected to the Mega 100WR in one of three ways

- Ethernet
- USB
- Wi-Fi

It is recommended that you initially connect to the router using a USB or Ethernet connection, in order to do the initial setup. Thereafter, you may connect using Wi-Fi if necessary.

> **NOTE**: Do **EITHER** section 4.1 **OR** section 4.2 as needed, not both !

4.1 Connecting the computer using a Ethernet connection

You can connect up to four Ethernet devices to your Mega 100WR. These devices may be computers, hubs, switches, printers etc. To do the initial configuration, it is recommended that you start by connecting only one computer. Please connect as shown in Figure 4.1. Proceed to 4.3

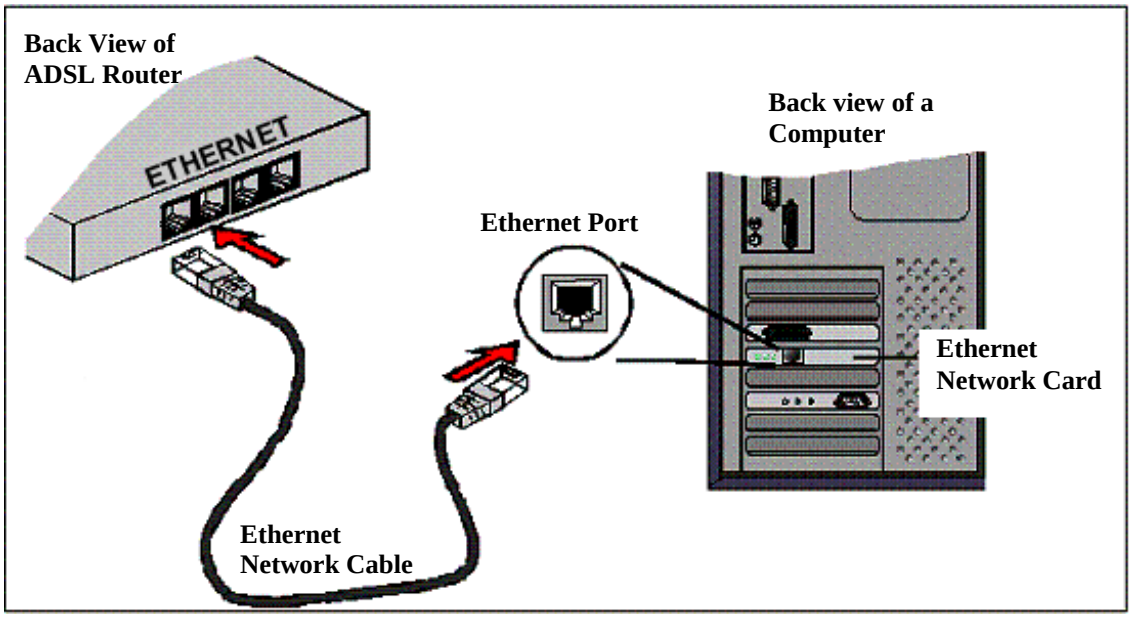
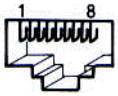
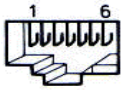


Figure 4-1 : Connecting via Ethernet

Do not mistake a Line Port for an Ethernet Port. In Figure 4-2, **A** illustrates an Ethernet port, whilst **B** illustrates a Line port. An Ethernet connector has positions for 8 pins while a line connector has 6 (but often only 2 or 4 are fitted)



A: ETHERNET



B: LINE

Figure 4-2 : Ethernet and line connections

4.2 Connecting the computer via USB

Your Mega 100WR is able to be connected to your computer's USB port. This is the same type of port that printers, webcams and other accessories are often connected to. Please connect your router to your computer using a USB cable as shown in Figure 4-3.

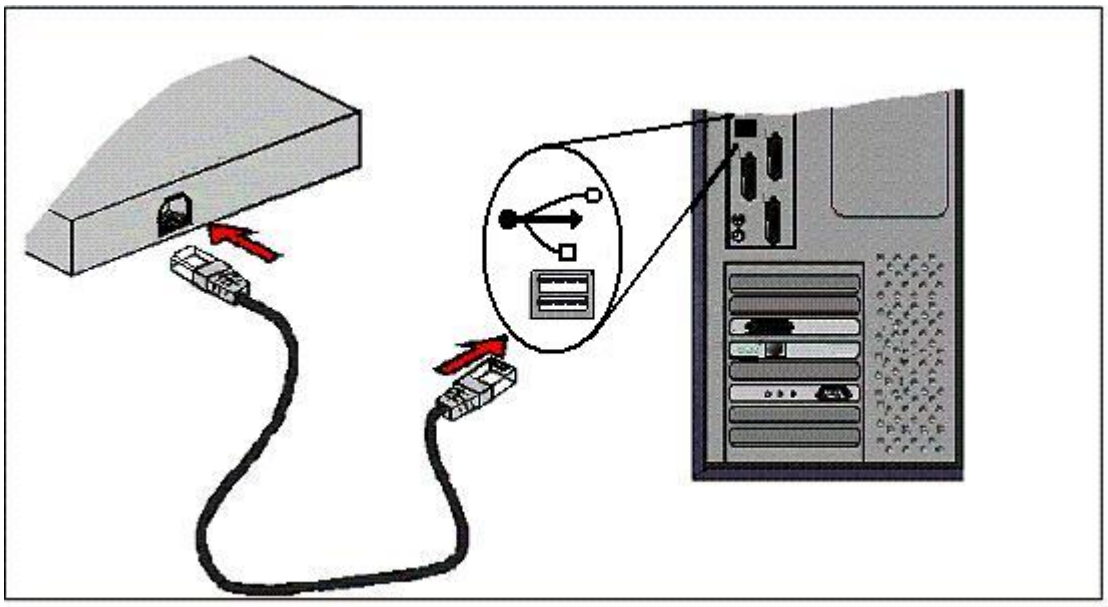


Figure 4-3: Connecting via USB

Either

If you are using Windows XP x64, please perform 4.3. Once this is completed, please follow the procedure laid out in chapter 7.

Upon completion of chapter 7, please continue with chapter 5

Or

If you are using any other Windows operating system, please perform 4.3.Once the drivers have been installed (as shown in Figure 4-4), please continue with chapter 5.

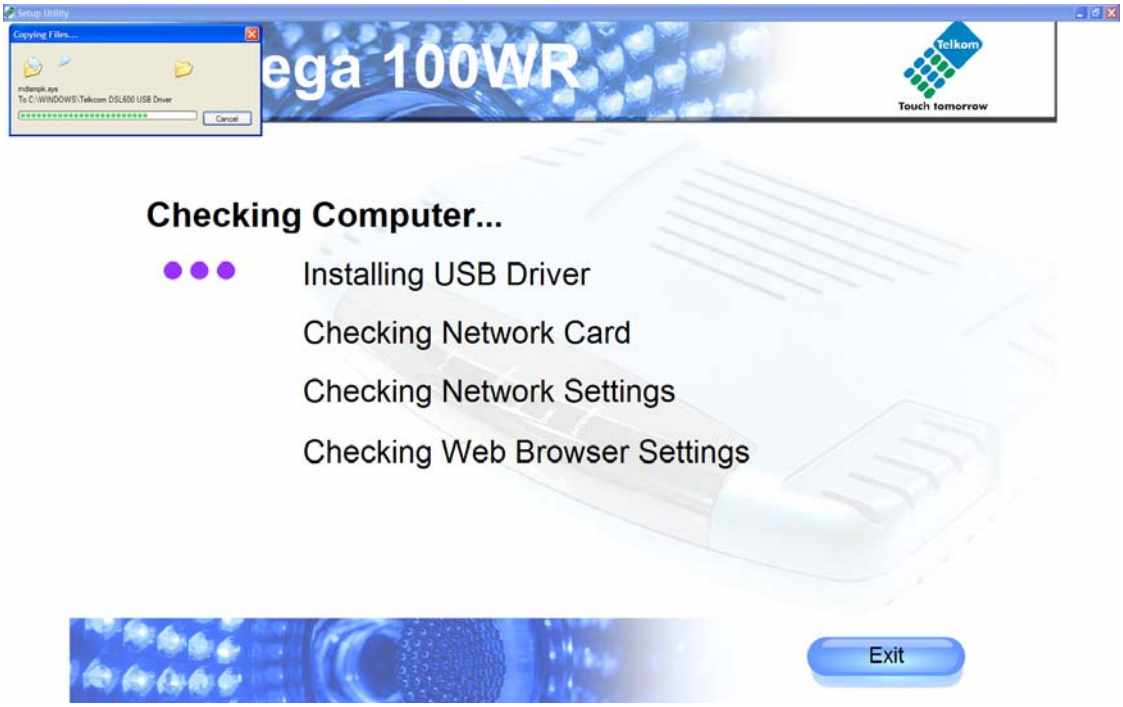


Figure 4-4: Installation utility installing drivers.

4.3 Powering ON

- Make sure that the power outlet that your router's power adaptor is connected to is turned ON
- Turn your Router's power switch ON.

Chapter 5 – Router Setup Utility – Windows

(For Windows 98 SE/ ME/ 2000/ XP Users Only)

> **NOTE**: Windows 98 SE users may be prompted for their Windows CD during installation. At the prompt, replace the Installation CD in your CD-ROM Drive with your Windows CD and click OK.

5.1 Running The Setup Utility

Insert the Setup Utility CD into the CD-ROM drive. The utility will auto-run and the screen as shown below will appear. (Note: If it does not auto-run, access the CD-ROM drive and execute **Setup.exe**).

If you are setting up your Mega 100WR Router for the first time, have done a factory default reset, or if you wish to change most of your previous settings, please click **Setup Wizard** to setup your DSL router. See **Fig 5-1**.

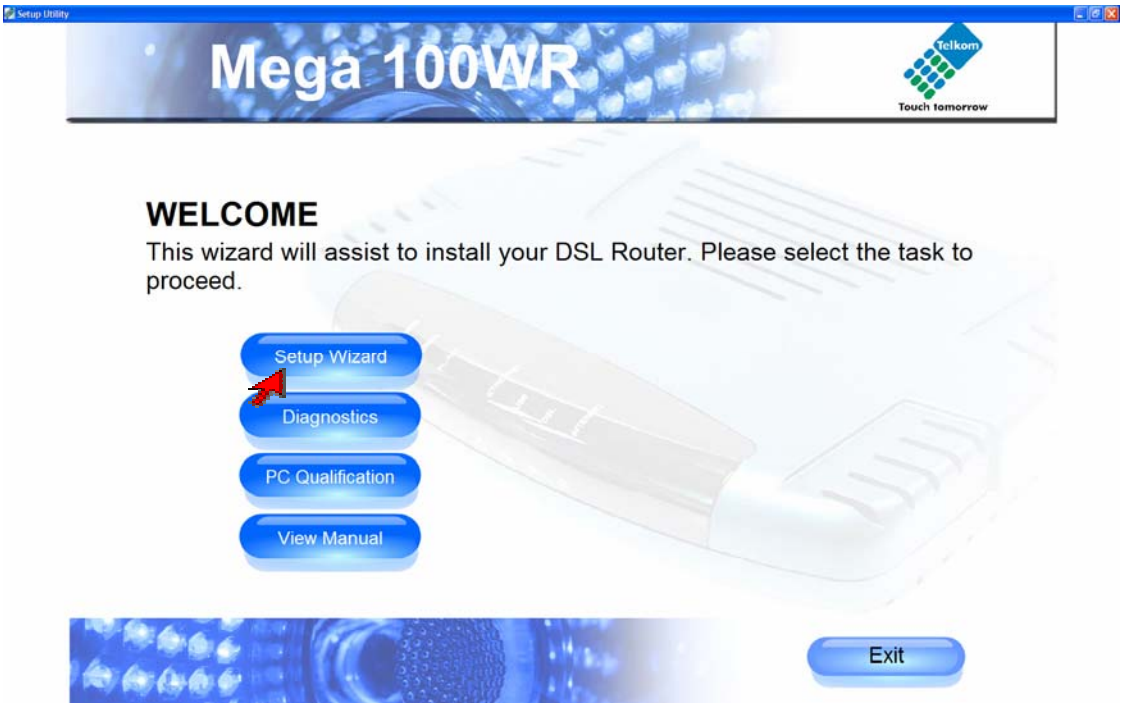


Figure 5-1 : Welcome screen

You will now be presented with the screen shown in Figure 5-2.

Do **one** of the following:

If you are using an **Ethernet** connection, you should now return to chapter 4 and do sections 4.1 and 4.3 only. You can then click on **Continue**

OR

If you are using a **USB** connection, click on **Continue** without plugging in any cables.

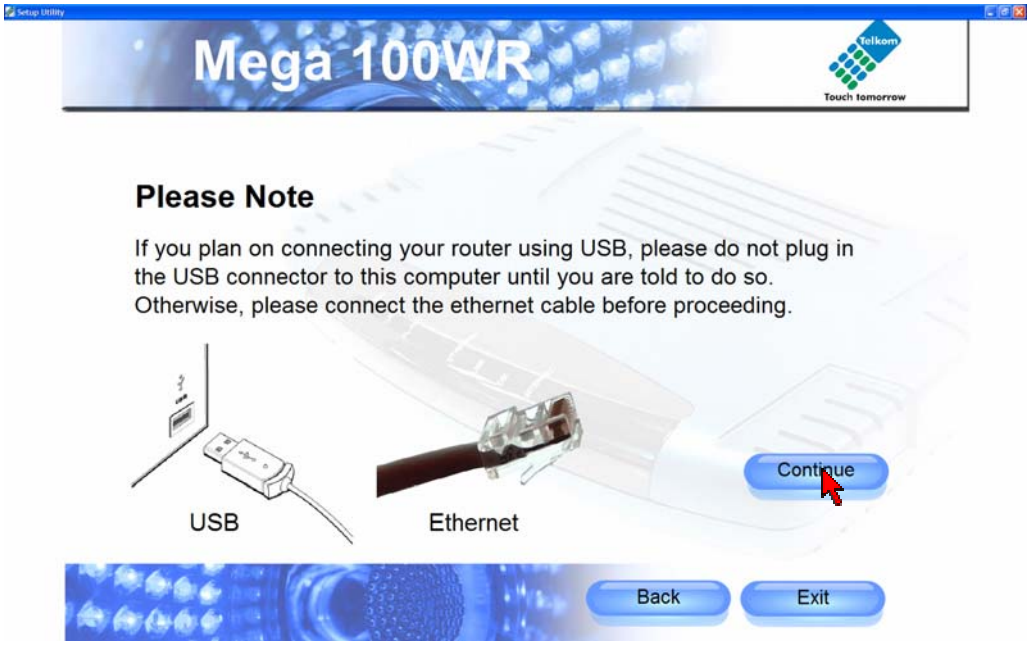

Mega 100WR
Telkom
Touch tomorrow
Please Note
If you plan on connecting your router using USB, please do not plug in the USB connector to this computer until you are told to do so.
Otherwise, please connect the ethernet cable before proceeding.
USB
Ethernet
Continue
Back
Exit

Figure 5-2 : Important Note

When presented with the screen shown in Figure 5-3, do **one** of the following:

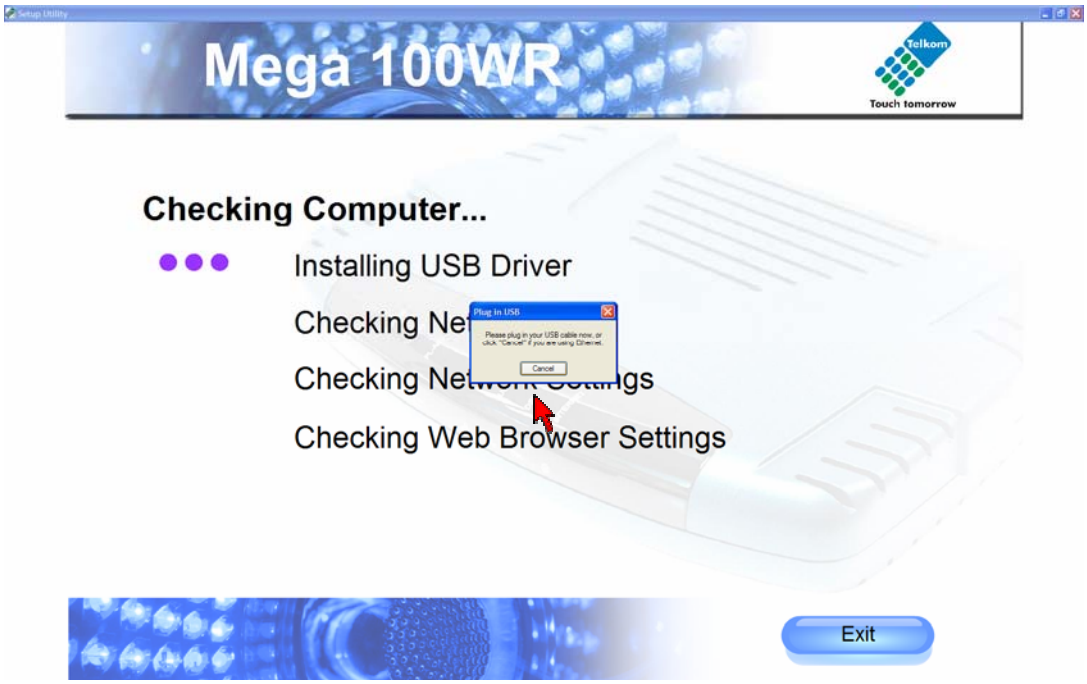


Figure 5-3 : USB driver instalation

If you are using an **Ethernet** connection, you should click "**Cancel**".

OR

If you are using a **USB** connection, you should now return to chapter 4 and do sections 4.2 and 4.3 only. The installation utility will install the USB drivers once it detects that the cable is correctly plugged in, and the router has been switched on.

The Installation utility will now begin to check your router and DSL connection. You will see the screen shown in **Figure 5-4.** As the various tests are performed, you will see a progress bar to the left of the list. Once the tests have passed, this will be replaced by a green tick mark. If for some reason any of the tests fail, the utility will present you with a series of help screens in order to correct your problem.

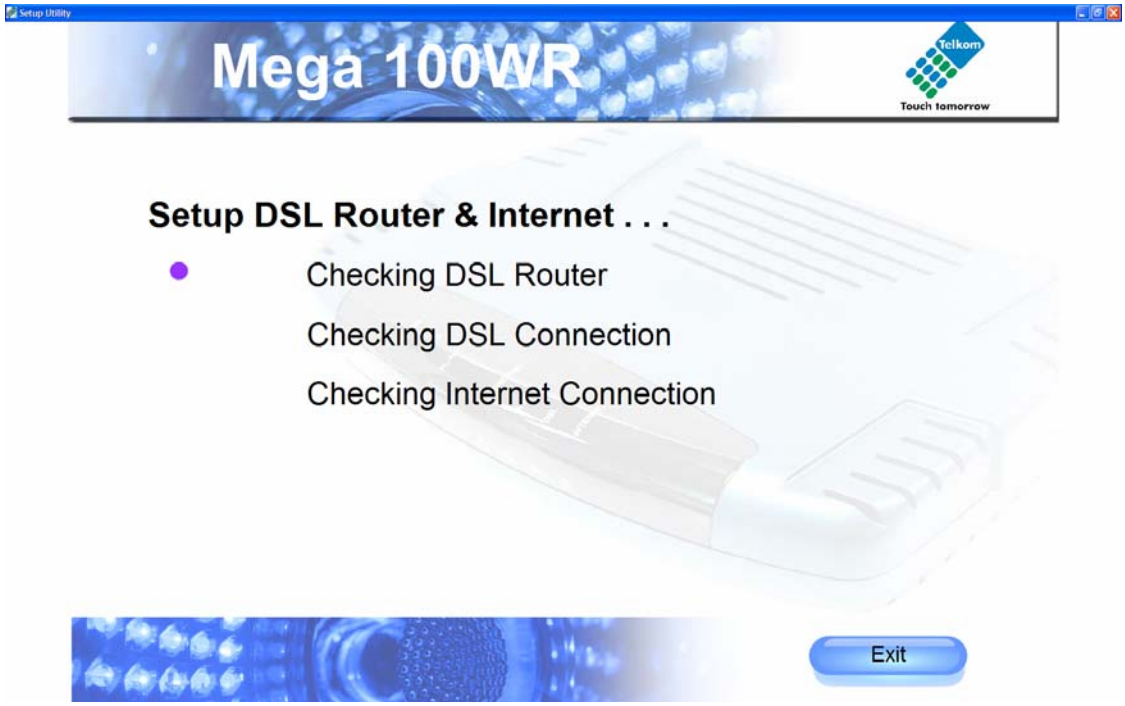


Figure 5-4 : Setup DSL router & internet

If you are setting up your router for the first time, or have restored the factory defaults by doing a factory default reset, you will be presented with the screen shown in Figure 5-5. This process is to verify your account details with Telkom, and to enable your ADSL account. If you do not proceed with this verification, your ADSL connection will not work until you do so. You only need to do this verification once, so if you have done a factory default reset and are running the setup utility for a second time, you can skip this next step and proceed directly to the screen shown in Figure 5-6 by clicking on **Activate,** then closing the web browser page that opens and clicking on **Continue.** Otherwise, please click on **Activate** and fill in the requested information. Close the web browser window once you have completed the verification, and click on **Continue**.

Setup Utility
Mega 100WR
Telkom
Touch tomorrow
Please activate your account at Telkom website
Note: You MUST perform the ADSL activation procedure before you will be able to access the Internet for the first time. If you have already completed this activation procedure for this line, it is not necessary to do so again.
Activate
Exit

Figure 5-5 : Verify ADSL account

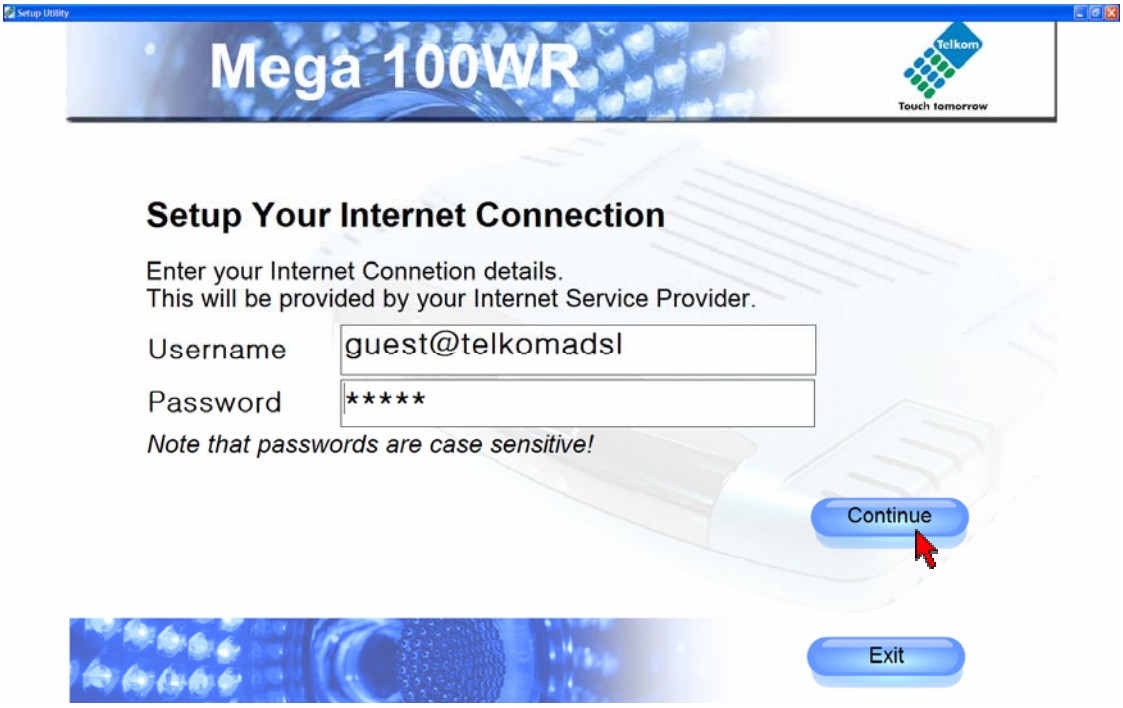


Figure 5-6: Internet Connection Setup

Once the installation utility has confirmed that everything is correctly set up, and that a connection to the internet is possible, you will be prompted for your internet account details – your Username and **Password** - which your ISP has provided. The guest account details that are shown are programmed into the router by default, and are used to test the connection. This account is designed to only access parts of the Telkom website. You will need to replace these details with your own account's information. Enter these details on the screen shown in Figure 5-6 and click **Continue** to proceed.

You will now be able to set up your Mega 100WR's wireless access point using the screen shown in Figure 5-7. The Wi-Fi encryption is set to WPA, with a unique key and is enabled by default. Your unique key is printed on the bottom of your Router for future reference. If you decide to change it now, you should record your new key as you will need it when you connect a computer via Wi-Fi. If you do not wish to connect via Wi-Fi in the future, it is best to disable the Access point by de-selecting the "Enable Access point" block. This will increase your router's security. You will be able to re-enable the Wi-Fi at any stage in the future if you choose to disable it now. It is also advisable to change your SSID at this stage. This is the public name of your wireless port. Once you have made the necessary changes, click **Continue**

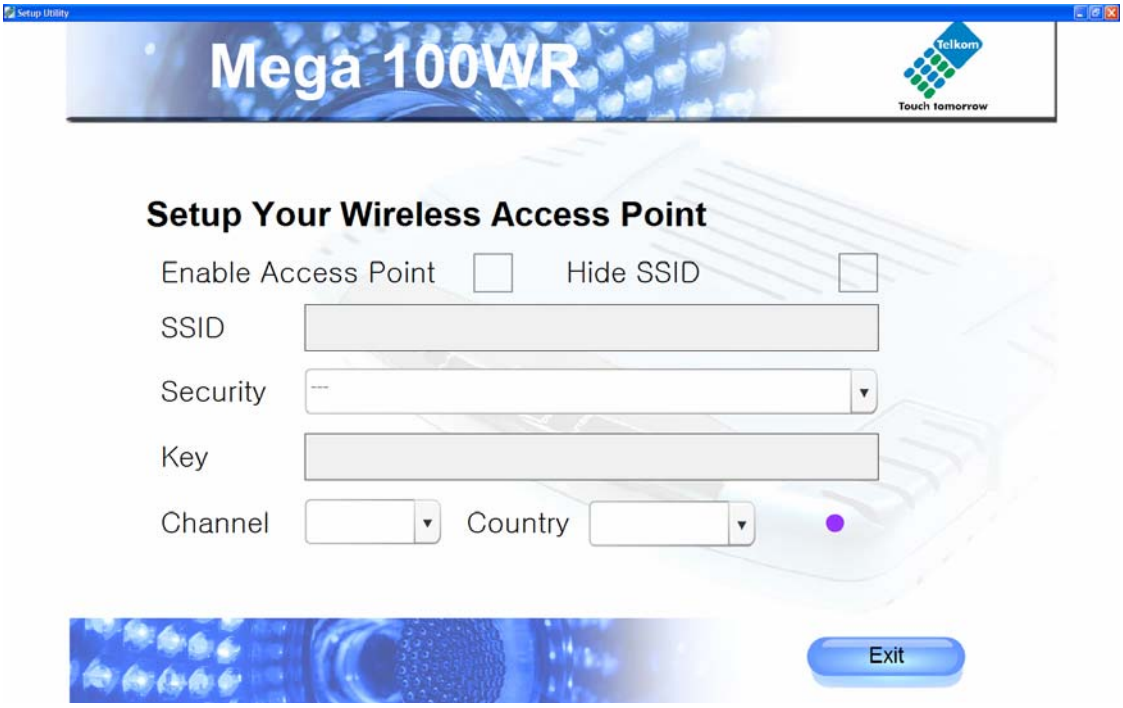


Figure 5-7: Wireless Access Point Setup

NOTE: For better security, you may choose to hide the SSID of your Mega 100WR router to prevent it from identifying its self to any computer with Wi –Fi. However, you must then manually set your wireless client with the same SSID.

The installation utility will now attempt to connect to the internet using your account details. While it is doing this, the screen in Figure 5-8 will be shown. If the router is unable to connect, the most likely cause will be that your username or password is incorrect, and you will be presented with the option to correct this.

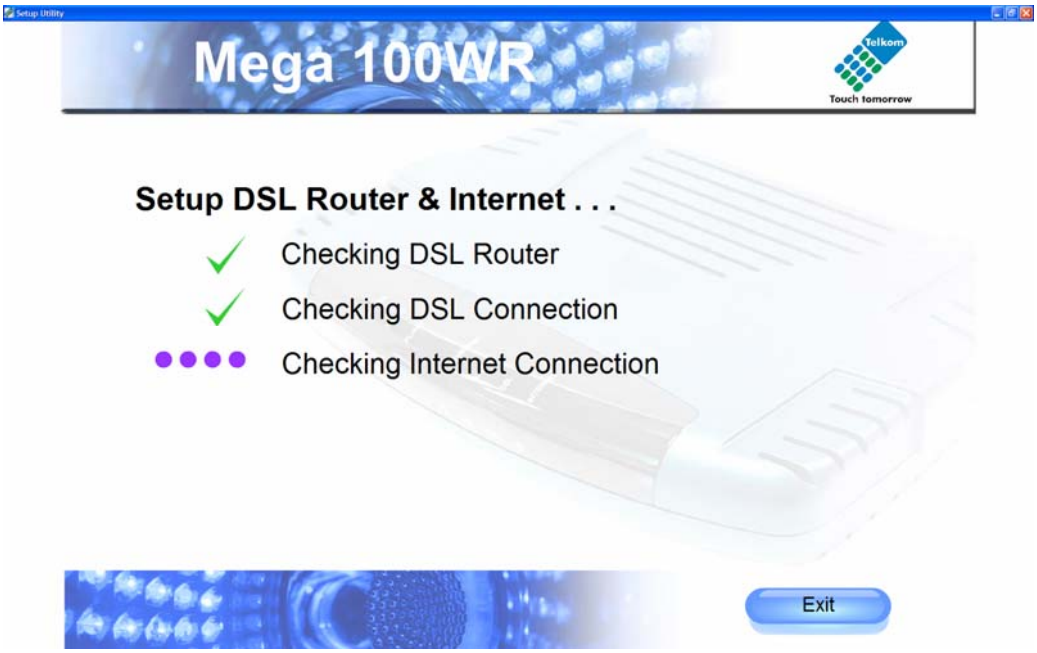


Figure 5-8: Checking username/password

Upon successful connection, the screen shown in Figure 5-9 will display a summary of your settings. You can choose to print or save the settings. To print, you need to have a printer installed. Click **Continue** to proceed.

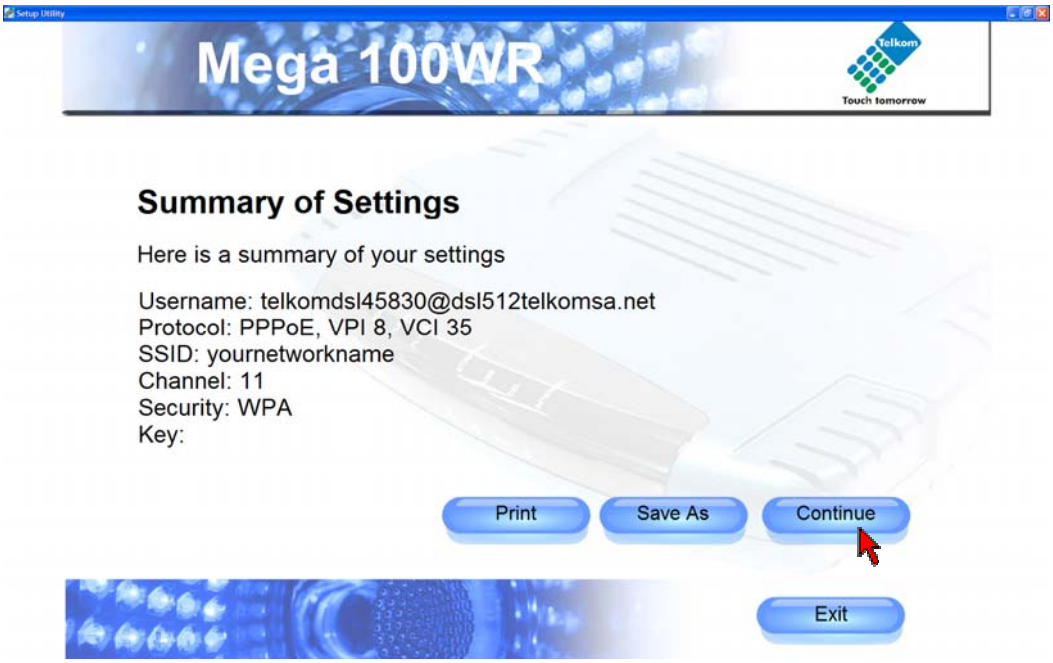


Figure 5-9 : Summary of Settings

NOTE: Keep the Setup Utility CD safely for future use.

A final confirmation that the installation utility has successfully run, Figure 5-10 will be displayed. Should you wish to browse the internet now, you may click on the cube. Otherwise, click on **Finish.**

Figure 5-10: Successful Connection

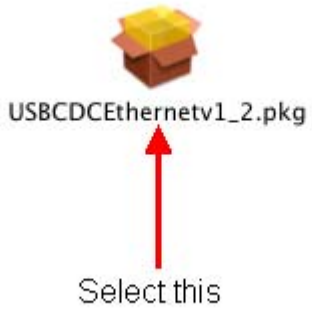
If you have trouble connecting your router to the Internet at any time, click **Diagnostics** on the **Welcome screen (Fig. 5-1)** to troubleshoot. For more information, click **View Manual** on the **Welcome screen (Fig. 5-1).**

Chapter 6 – Router Setup Utility – MAC OS

(For Mac® OS 10.2 & above only)

6.1 Running the setup utility

- Power on your computer to start Mac OS X (V10.2 & above).
- Place the **Installation CD** into your CD-ROM Drive.



- Access to the CD-ROM drive and double-click on **Mac** folder. Select **USBCDCEthernetv1_2.pkg** file and open, as shown in **Fig 6-1**.

Figure 6-1 : Installation from Location

- A Macintosh® Administrator authentication window (Figure 6-2) will be shown. Enter your administrator login Name and Password or phrase. Click on OK to proceed.

Figure 6-2 : Authentication

- Installation program will start. On the screen shown in Figure 6-3, click **Continue** to proceed with the installation.

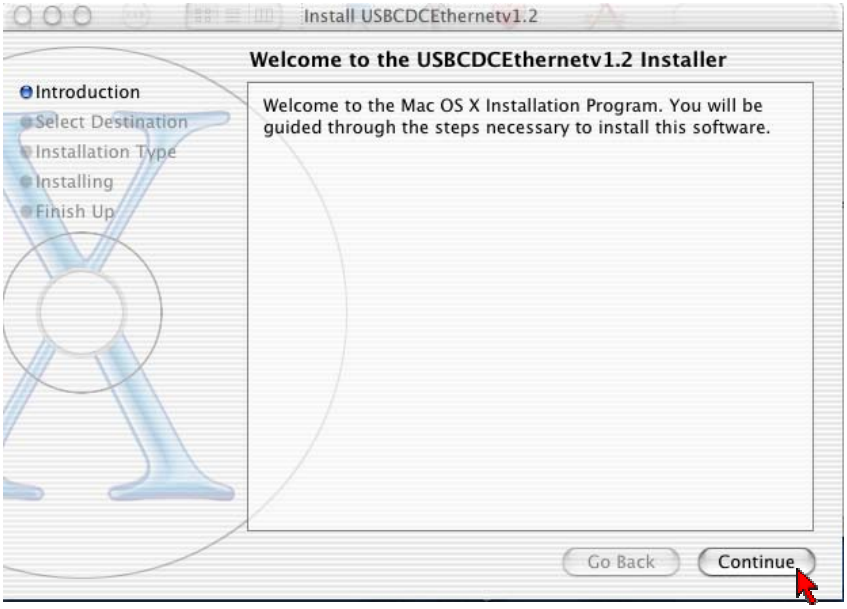


Figure 6-3 : Installation program

- On the screen shown in Figure 6-4, select a destination disk to install the software. Click **Continue** to proceed with the installation.

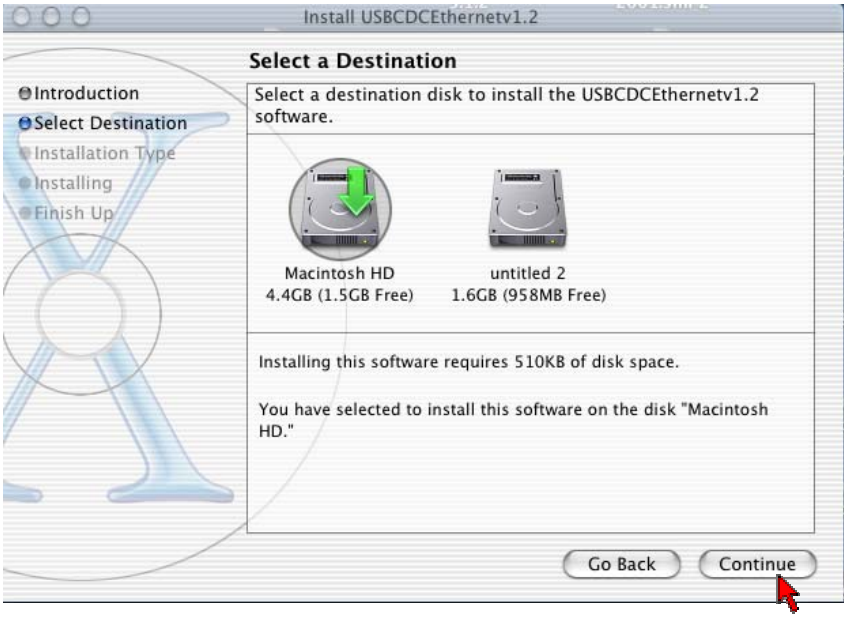


Figure 6-4 : Select destination disk

- Click **Install** on the screen shown in Figure 6-5 to perform the installation.

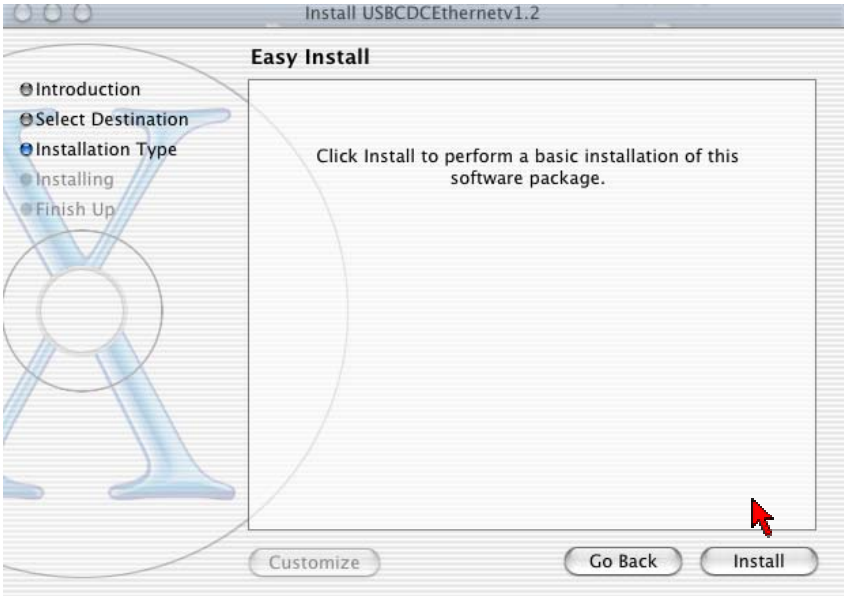


Figure 6-5 : Easy Install

- The system will prompt you to restart your computer when installation is completed. On the screen shown in Figure 6-6, click **Continue Installation** to proceed.

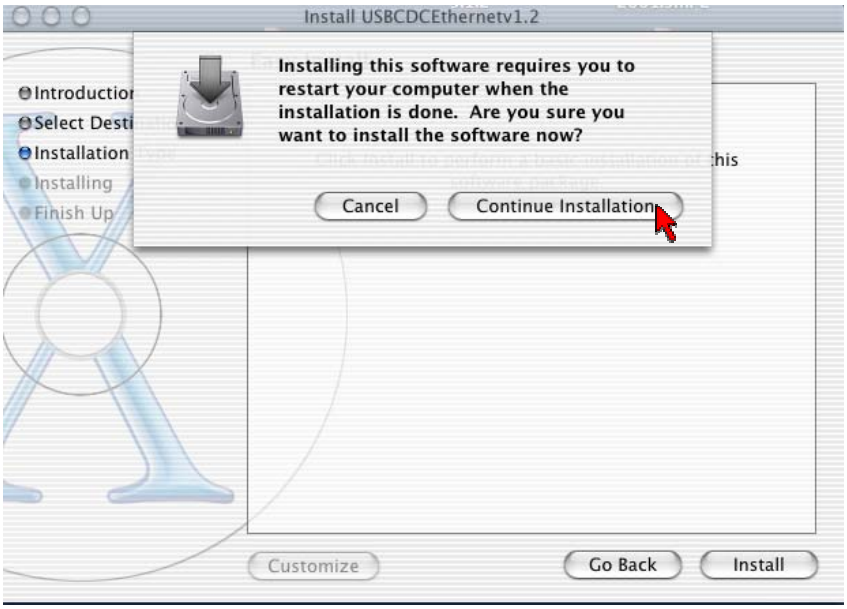


Figure 6-6 : Continue Installation prompt

- In the screen shown in Figure 6-7 , click **Restart** to finish installing the software.

Figure 6-7 : Software installed successfully

- The system will reboot. Select **System Preferences** from the dock. Select **Network,** as shown in Figure 6-8, to choose the network adaptor connected to the router.

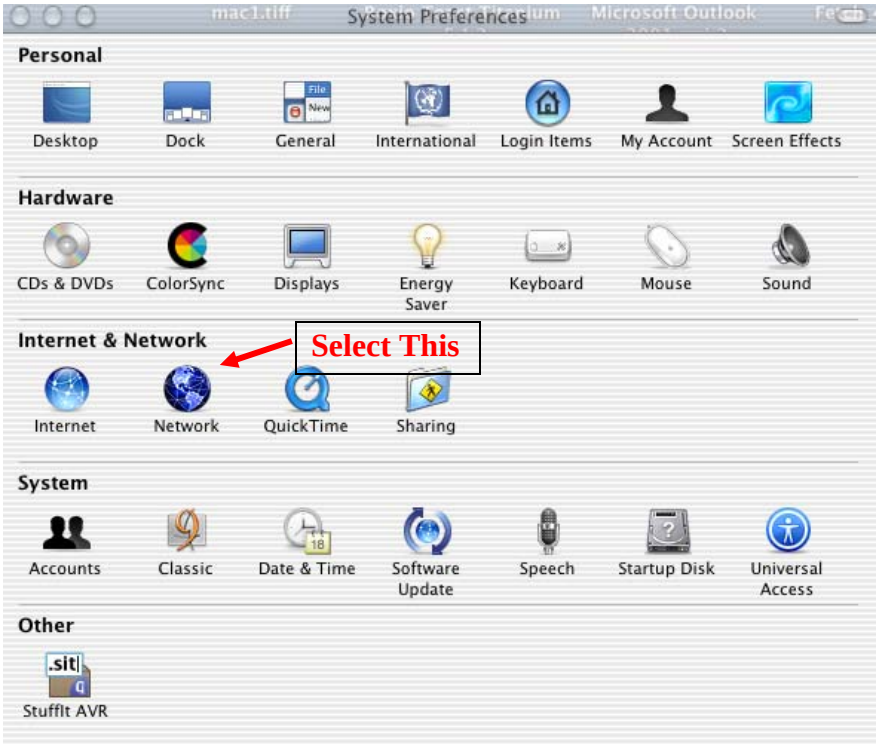


Figure 6-8 : System Preferences

- Select **Ethernet Adaptor (enXX)** as your adaptor under **Show** option. Your IP Address, subnet mask, router IP should appear as shown in Figure 6-9.

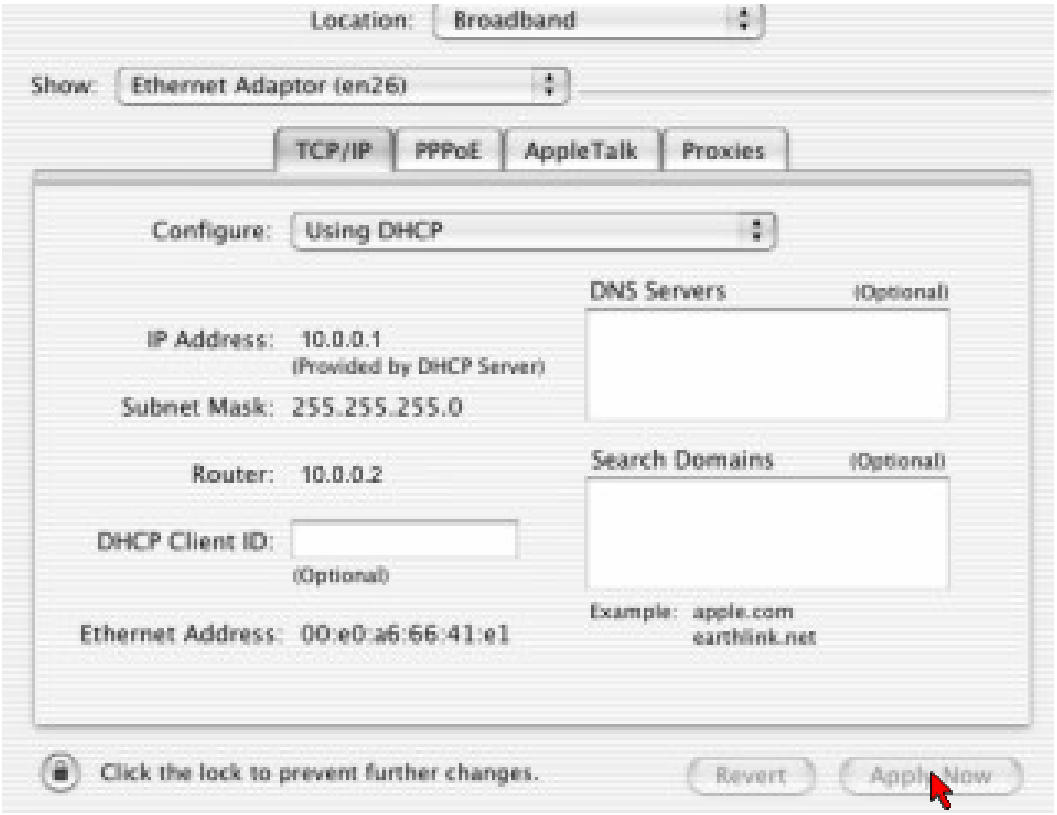


Figure 6-9 : Network settings

- You should now continue on Chapter 8

Chapter 7 – USB Setup – Windows XP x64

The following USB setup is required as part of the windows installation utility for Windows Xp X64. It may also be followed when setting up the USB drivers on a windows XP x64 computer, without using the installation utility.

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).
Online privacy information
Can Windows connect to Windows Update to search for software?
Yes, this time only
Yes, now and every time I connect a device
No, not this time
Click Next to continue.
< Back
Next >
Cancel

Figure 7-1: Found New Hardware Wizard

Upon plugging in your USB cable, a **Found New Hardware Wizard** dialog box will appear (Figure 7-1). Select **No, not this time** and click **Next**.

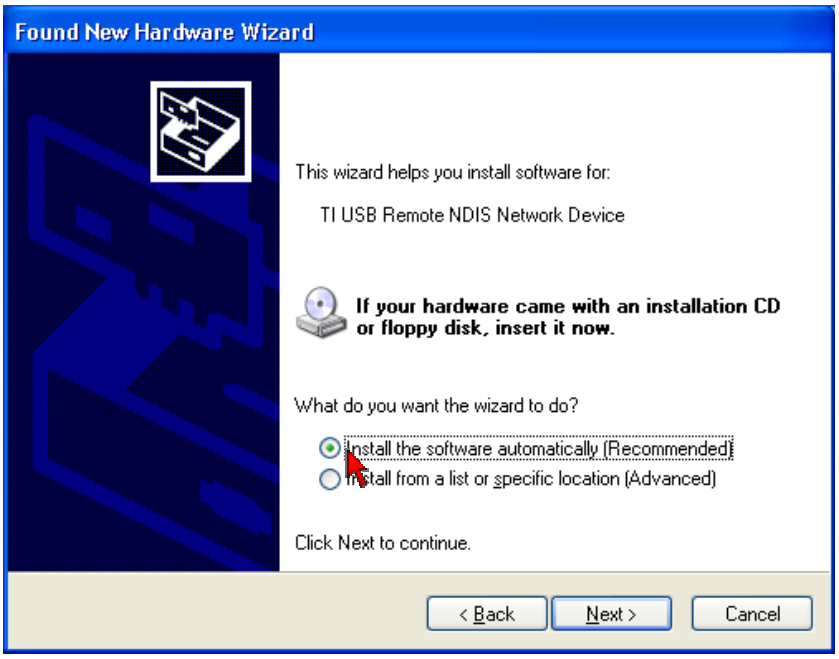

Found New Hardware Wizard
This wizard helps you install software for:
TI USB Remote NDIS Network Device
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

Figure 7-2 : Install Software Automatically

The screen shown in Figure 7-2 will now be shown. Select **Install the software automatically (Recommended)** and click **Next**.

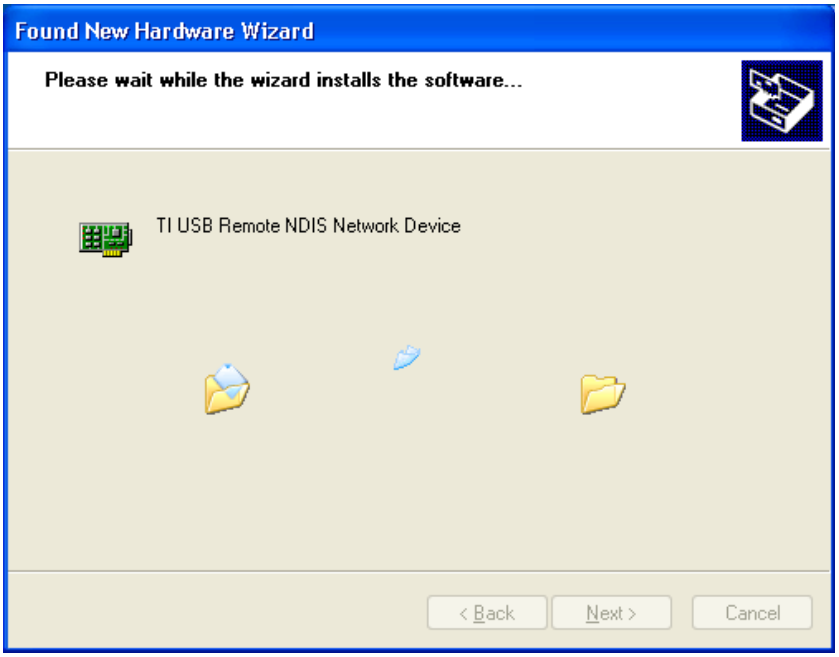


Figure 7-3 : Installation in progress

Figure 7-3 shows the USB driver is being installed. Please wait for this to finish.

You may be prompted with a Hardware Installation dialog box. (Figure 7-4).This happens when Windows detects your driver as a new version.

Click **Continue Anyway** to proceed with the installation.

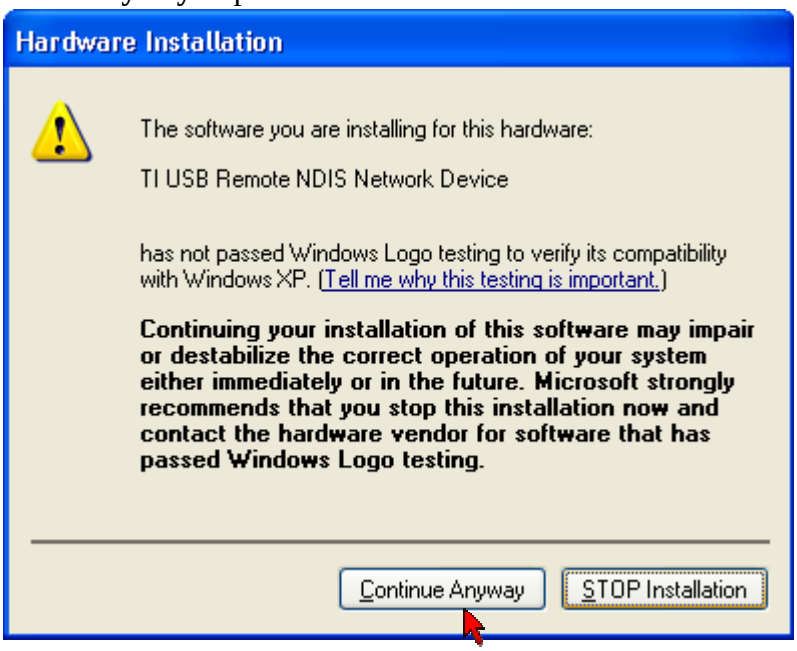

Hardware Installation
The software you are installing for this hardware:
TI USB Remote NDIS Network Device
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

Figure 7-4 : Hardware instalation screen

The screen shown in Figure 7-5 shows that installation of USB driver is complete, click **Finish**.

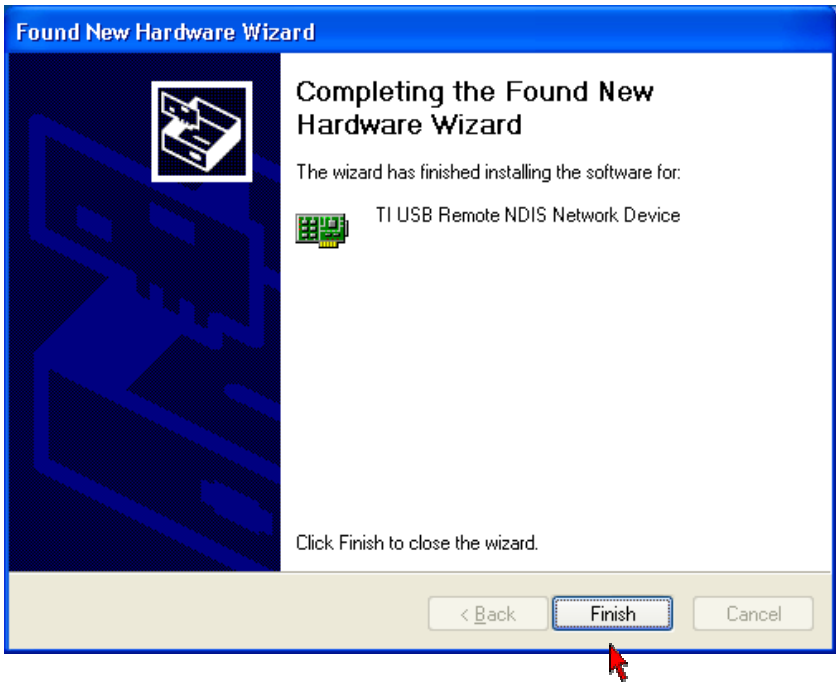

Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
TI USB Remote NDIS Network Device
Click Finish to close the wizard.
< Back
Finish
Cancel

Figure 7-5 : Installation Complete

If you were directed to follow this chapter by chapter 4, you will now need to return to chapter 4 to continue with the installation utility. Otherwise, the installation of your USB drivers is now complete

CHAPTER 8– Configuring Your Internet Browser

Most web browsers can be used to connect to the routers web interface. This document only gives the settings for the most common browsers that are know to work.

Please follow the steps appropriate to the web browser that you are using (If you are a windows user, then this will most likely be Internet Explorer.)

8.1 Microsoft® Internet Explorer™ (based on IE 5.5)

1. From your Windows desktop, double-click on your **Internet Explorer** icon to launch your Browser.

2. From the Menu, click **Tools** and select **Internet Options...** .
3. Select the **Connections** tab. Click the field, **'Never dial a connection'**. (This option will be grayed off if you have not installed an analog modem on your computer/notebook before.
4. Click the **LAN Settings...** button. Ensure that your **Proxy Server** is not enabled.
5. Click **OK** to close the dialog box.

OR

8.2 Netscape Navigator

1. From your Windows desktop, double-click on your **Navigator** icon to launch your Browser.

2. Click **Options** > **Network Preferences**.
3. - Select **Proxies**. Ensure that the **No Proxies** option is selected.

   OR

   - Click **Edit** > **Preferences**.

   - Select **Advanced** and click **Proxies**. Ensure that the option **Direct Connection to the Internet is enabled**.
4. Click **OK** for changes to take effect.

CHAPTER 9– Using the Web setup sequence to configure your router.

Open your web browser and key in **10.0.0.2** at the address bar and hit <**Enter**> . See **Fig 9-1**.

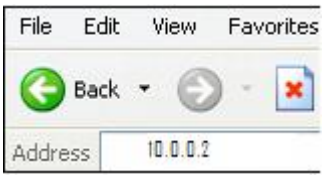


Figure 9-1: Logging-In

Once connected, the router will request you to enter your username and password. (Figure 9-2). The default username is **admin** and the default password is **admin**. Click **Log in** to continue.

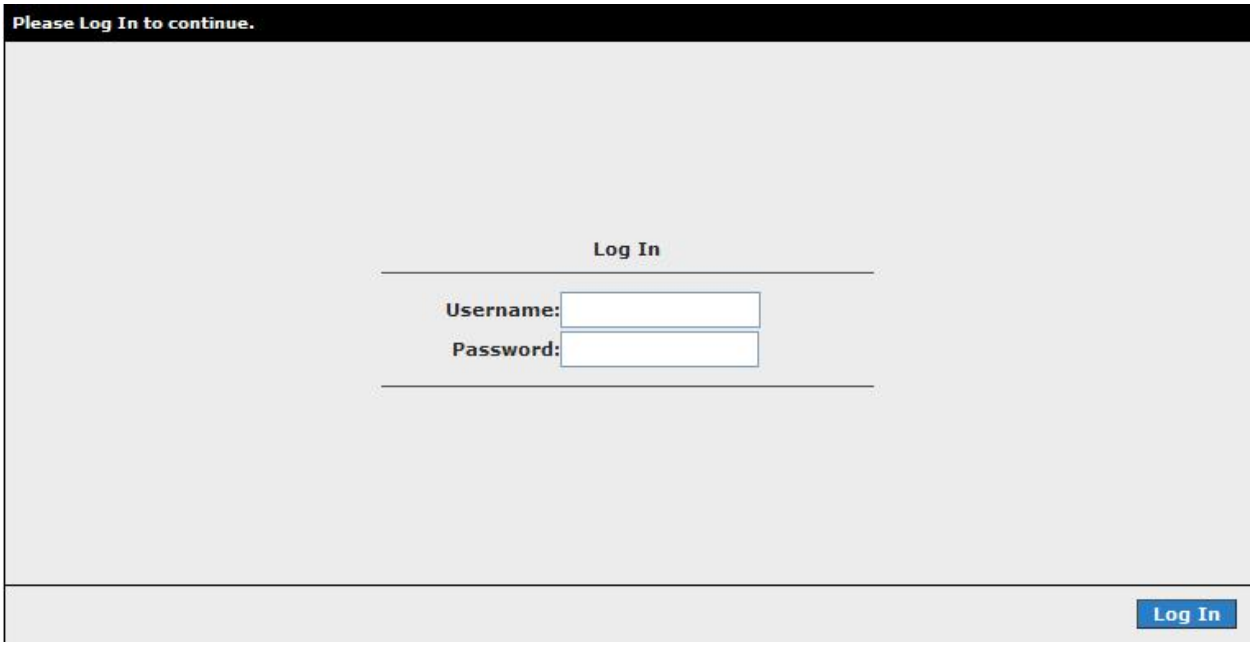


Figure 9-2 : Login screen

After login, you will enter the web setup page shown in Figure 9-3. to continue, please click on **>>Step 1 : Internet login account settings**

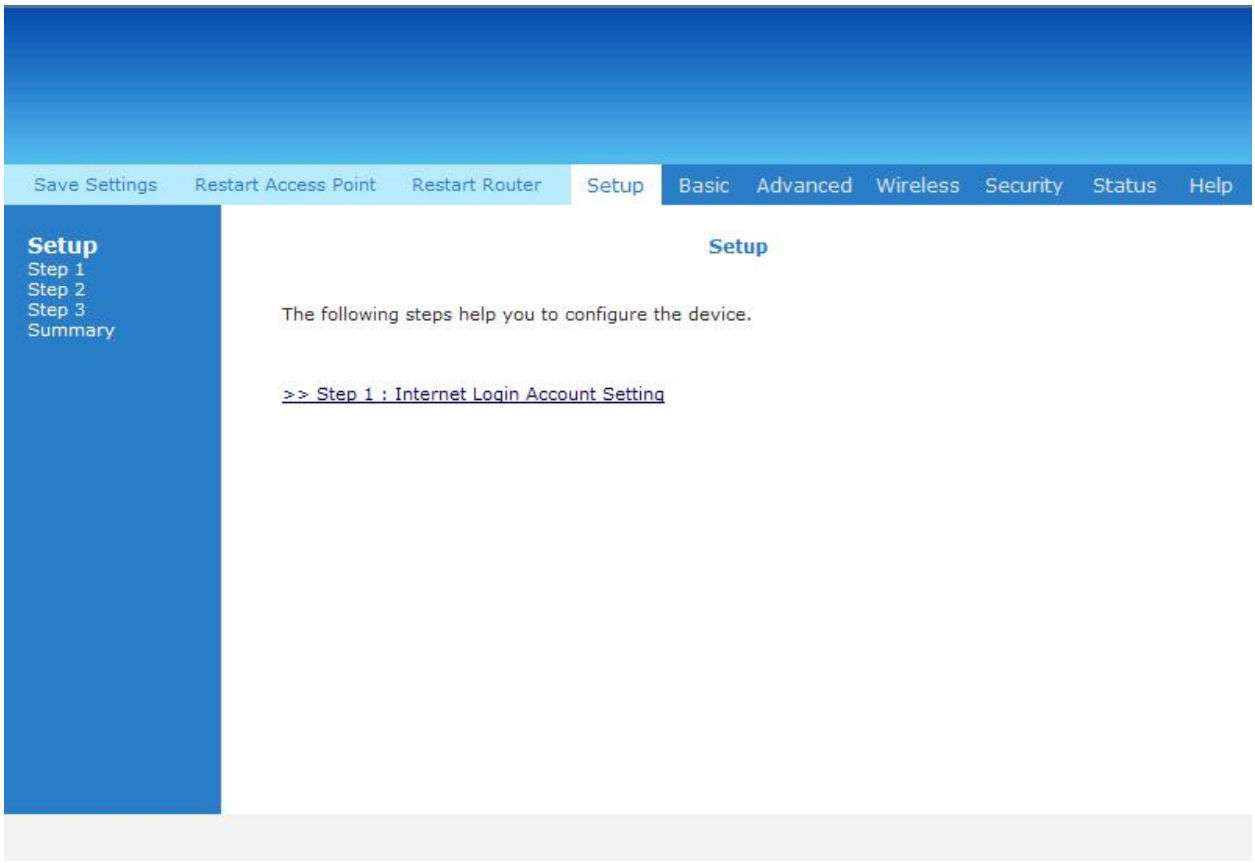


Figure 9-3: Setup page

You need to enter the **Username** and **Password** that your ISP provided. Please do not change **VPI** , **VCI** or PPPoE setings unless your ISP has requested this . Click on **Next** to continue . Figure 9-4 shows the screen that is provided to enter in these details.

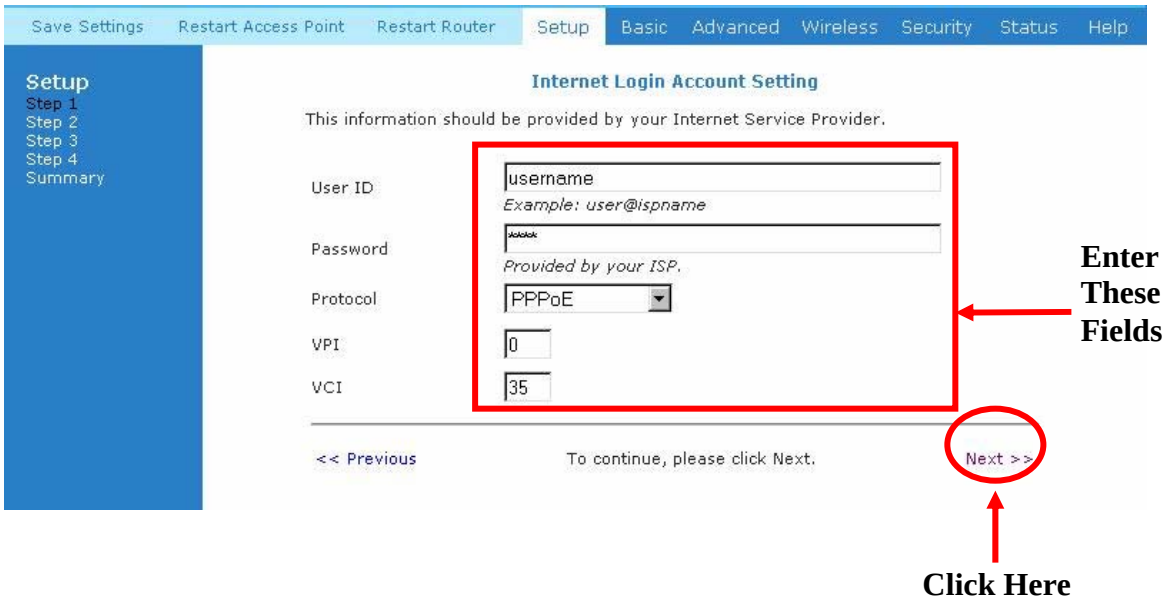


Figure 9-4 : Account Set-Up

You are now able to configure your wireless network using the screen shown in Figure 9-5. You should now choose a network name **(SSID)** for your router. You can also generate a random SSID by clicking on '**Generate SSID**'. If you wish, you can choose to hide the SSID. This will provide additional security to your Wi-Fi port. Click on **Next** to continue.

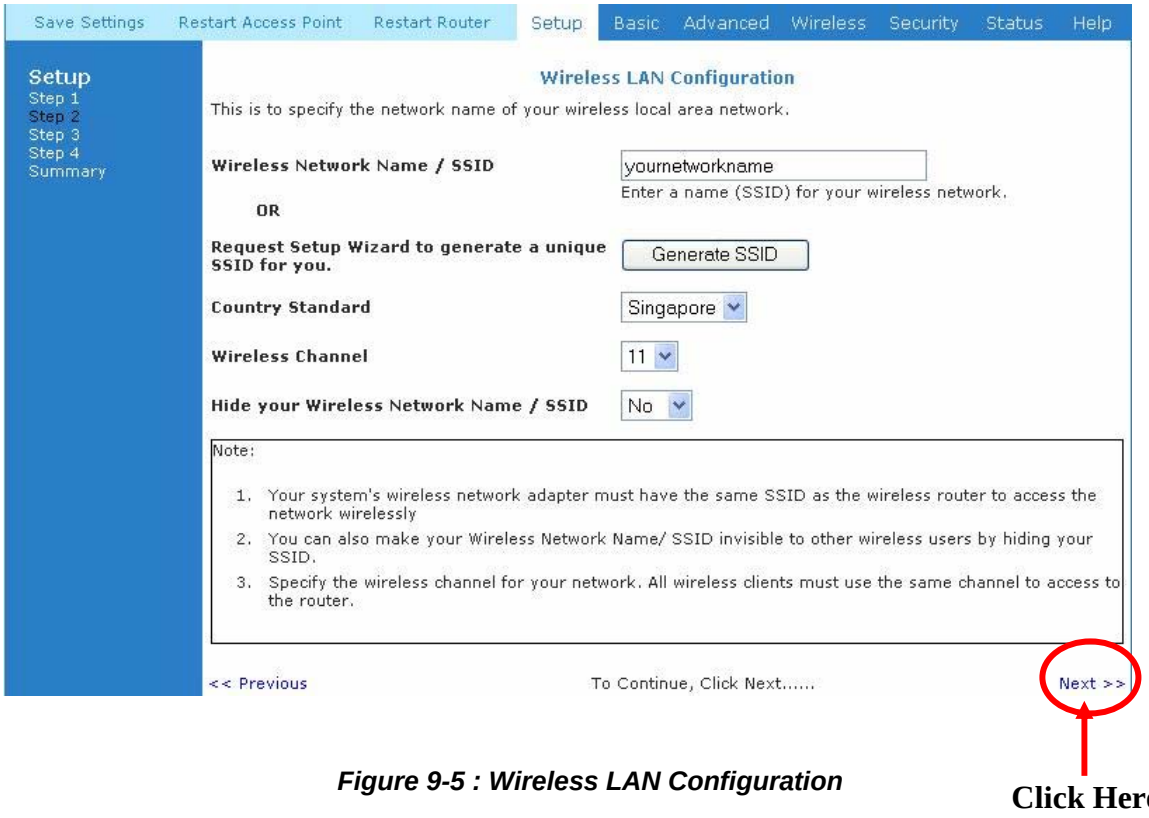

Save Settings
Restart Access Point
Restart Router
Setup
Basic
Advanced
Wireless
Security
Status
Help
Setup
Step 1
Step 2
Step 3
Step 4
Summary
Wireless LAN Configuration
This is to specify the network name of your wireless local area network.
Wireless Network Name / SSID
yournetworkname
Enter a name (SSID) for your wireless network.
OR
Request Setup Wizard to generate a unique SSID for you.
Generate SSID
Country Standard
Singapore
Wireless Channel
11
Hide your Wireless Network Name / SSID
No
Note:
1. Your system's wireless network adapter must have the same SSID as the wireless router to access the network wirelessly
2. You can also make your Wireless Network Name/ SSID invisible to other wireless users by hiding your SSID.
3. Specify the wireless channel for your network. All wireless clients must use the same channel to access to the router.
<< Previous
To Continue, Click Next.....
Next >>
Click Here

Figure 9-5 : Wireless LAN Configuration

The next screen (Figure 9-6) will require you to change your router login details. This is recommended as a security measure. You are also able to turn the login authentication off so that no password or user name is requested when you connect to the router's web page. This is not recommended. Click on **Next** to continue

Figure 9-6 : System Password

Figure 9-7 shows the summery of details that you will now be presented with.. It is advisable to either Save or print out the summary information. Click **Finish** to complete the setup.

Figure 9-7 : Summary

Your information will be saved, and the progress bar shown in Figure 9-8 will be displayed to indicate connecting process to the Internet.

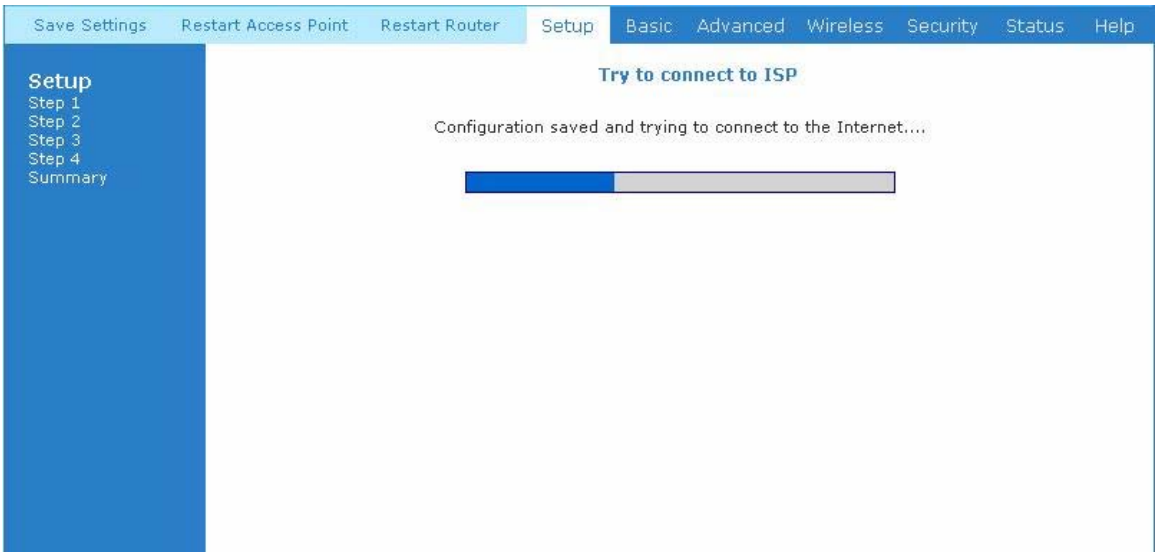


Figure 9-8 : Connecting To ISP

Upon successful connection to the Internet, you will be asked to log in to your router again (unless you disabled the login authentication in Figure 9-6) . Figure 9-9 will now be displayed.

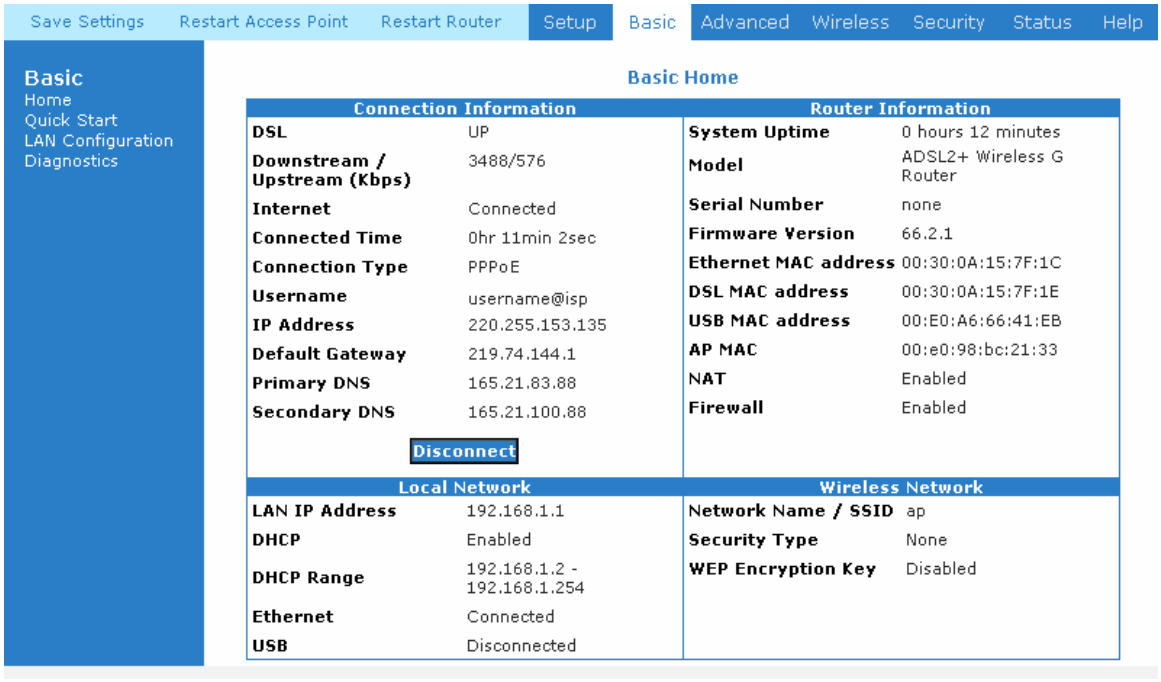


Figure 9-9 : Successful Connection

NOTE: the router's Wi-Fi card is enabled by default, with WPA encryption (see router's base for default key. Should you wish to disable Wi-Fi or change the key, you will need to do this manualy by selecting the **wireless** tab on Figure 6-10 and selecting the security label

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